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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,053	07/09/2004	Long Yu	34622/US	1753
25763 7590 04/06/2007 DORSEY & WHITNEY LLP INTELLECTUAL PROPERTY DEPARTMENT SUITE 1500 50 SOUTH SIXTH STREET MINNEAPOLIS, MN 55402-1498			EXAMINER SAOUD, CHRISTINE J	
			ART UNIT	PAPER NUMBER
			1647	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/06/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/501,053

Applicant(s)

YU ET AL.

Examiner

Christine J. Saoud

Art Unit

1647

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-13, 16-18, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-13, 16-18 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 07/09/04.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: notice to Comply

DETAILED ACTION

Response to Amendment

Applicant's amendment to the claims, filed 21 February 2007, has been received. However, the amendment does not properly reflect the currently pending claims and their proper status in the instant application. In the response filed 31 October 2006, Applicant added claims 21 and 22. The Examiner erred in neglecting to account for these claims in the restriction requirement mailed on 24 January 2006. In the paper received 21 February 2007, Applicant again refers to claim 21 as "New", but it is now "previously presented". Furthermore, claim 22 is not presented nor is it indicated to be canceled.

Because the claim has not been canceled, it is being accounted for as pending, but non-elected. In the next response, Applicant should be sure to account for each and every claim, whether elected or non-elected, pending or canceled, using the appropriate status identifiers.

Claims 1-10, 14-15, and 19-20 have been canceled. Claims 11-13, 16-18 and 21-22 are currently pending.

Election/Restrictions

Applicant's election without traverse of Group I in the reply filed on 21 February 2007 is acknowledged. Claim 22 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 09 July 2004 is in compliance with the provisions of 37 CFR 1.97 and has been considered by the Examiner.

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Sequence Compliance

The disclosure is objected to because of the following informalities: the specification fails to comply with the sequence rules, 37 CFR 1.821(a-d). Figure 1 contains amino acid sequences which are not represented by a Sequence Identifier, nor are they included in the Sequence Listing.

Appropriate correction is required.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention ***to which the claims are directed***.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-13, 16-18 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11 and 18 recite the limitation "HDGF5", however, this term has no accepted meaning in the art at the time of the instant invention. Therefore, the metes and bounds of "HDGF5" cannot be determined. Applicant should spell out what "HDGF5" stands for at its first occurrence.

Claims 11 and 18 recite "HDGF5 protein activity" and "having the activity of HDGF5 protein", however, the specification fails to identify what this activity is meant to encompass. The only activity that could be found in the specification is at page 17 (proliferation of mouse endothelium cells). This ground of rejection could be obviated by including this activity in the claims.

Claim 18 recites the limitation "the nucleotide sequence" in line 3, however, there is insufficient antecedent basis for this limitation in the claim. This is because there are more than one nucleotide sequence which would code for the protein, and it is unclear which one "the nucleotide sequence" is referring to.

Claim 18 refers to a method of producing a polypeptide, however, step (d) refers to isolating "the polypeptides". There is insufficient antecedent basis for the plural "polypeptides" recited in step (d).

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Claim 18 recites "thereby forming a recombinant cell of HDGF5 protein". It is unclear what is intended by this limitation (i.e. it does not make grammatical sense).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Tirado et al. (GenBank Acc. No. AY061636, 13 November 2001).

Tirado et al. teach a nucleic acid molecule which has greater than 90% homology to SEQ ID NO:1. Tirado et al. disclose that the nucleic acid molecule encodes a HDGF protein (see title; "A new member of the HDGF family, an apoptotic role?"). Therefore, Tirado et al. anticipates the instant claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 11 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tirado et al. (GenBank Acc. No. AY061636, 13 November 2001) in view of Sibson et al. (WO 94/01548).

The teachings of Tirado et al. are as described above. Tirado et al. do not teach vectors, hosts or expression and isolation of the encoded protein.

Sibson et al. disclose that it is generally useful to place a desired cDNA sequence into an expression vector, host cell, and express the encoded protein. See pages 8-13. Therefore, it would have been obvious to the person of ordinary skill in the art at the time the invention was made to use the DNA's disclosed by the primary reference(s) to express and then isolate the encoded polypeptide as taught by Sibson et al. in view of Sibson et al.'s suggestion that it would be desirable to do so, as cited above. One would be motivated to express the encoded protein of Tirado et al. because Tirado et al. identify the nucleic acid as encoding a member of the HDGF family and that it may have a role in apoptosis. One would have a reasonable expectation of success in making vectors, host cells and expressing the encoded protein because Sibson et al. establish that this was routine at the time the instant invention was made. Therefore, the invention as a whole would have been prima facie obvious at the time it was made, absent evidence to the contrary.

Conclusion

No claim is allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine J. Saoud whose telephone number is 571-272-0891. The examiner can normally be reached on Monday-Friday, 6AM-2PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback can be reached on 571-272-0961. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CHRISTINE J. SAOUD
PRIMARY EXAMINER

Christine J. Saoud